

WHAT IS CLAIMED IS:

1. A lithium secondary battery comprising a positive electrode, a negative electrode, an electrolytic solution  
5 and a separator, wherein
  - a plurality of positive electrodes and negative electrodes are arranged to construct an electrode structure which includes an outermost layer of electrode on which a back coat layer is formed.
- 10 2. The lithium secondary battery of claim 1 wherein said back coat layer has a function of preventing the electrodes from short-circuiting.
- 15 3. The lithium secondary battery of claim 1 wherein said back coat layer has a function of preventing the electrodes from warping.
- 20 4. The lithium secondary battery of claim 1 wherein said back coat layer contains at least an inorganic material as a filler and/or a resin.
- 25 5. The lithium secondary battery of claim 1 wherein said filler is the same material as an electrode active material.
6. The lithium secondary battery of claim 1 wherein said separator has a piercing strength of at least 50 gf.
- 30 7. The lithium secondary battery of claim 1 wherein said back coat layer has a thickness of 50 to 500  $\mu\text{m}$ .
8. The lithium secondary battery of claim 1 wherein said electrode structure is a laminate structure.